Express Mail Label No: EO905029306US
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In the United States Patent and Trademark Office

In re the Application of:

Lorin Evan Ullmann	)	
Serial Number: 09/714,756	)	Group:2154
Docket Number: AUS9-2000-0707-US1	)	Examiner: Mohammad A. Siddiqi
Filed on: 11/16/2000	)	
For: "Method and System for E-mail	)	
Chain Group Discussions"	)	

APPEAL BRIEF

Real Party in Interest

The subject patent application is owned by International Business Machines Corporation of Armonk, NY.

Related Appeals and Interferences

None.

Status of Claims

On September 9, 2004, appellant appealed from the final rejections of claims 1 - 27.

Status of Amendments

An amendment to the claims was entered in our reply dated April 27, 2004. Claims 1, 10 and 19are independent claims. The claims are reproduced in the Appendix to this Appeal Brief.

Summary of the Invention

The present invention creates a new email message from a single email message which has been replied to and forwarded many times. Normally, as people forward and reply to an first email message repeatedly, the message grows in length, and the email systems mark the previously sent text using a delimiter of some sort, often one or more ">" characters in the left margin of the message. After several forwards and replies, the accumulated message, which we refer to as a "chain forwarded message" can become difficult to read and understand the history

of the ensuing discussion. Our Tables 4 and 5 provide illustrations of such messages, both linear and non-linear types.

Our invention creates a "thread-of-discussion" formatted email message from such a chain forwarded email message, by parsing text a single chained electronic mail message into discussion entries, sorting the discussion entries into a preferred order, eliminating redundant and unnecessary information from the discussion entries, and outputting the sorted, reduced discussion entries into a single message having a thread-of-discussion message format.

We have defined "thread-of-discussion" format to be a format similar to that which users see in a chat room discussion, wherein the discussion entries are shown in an order and minimal format, each discussion entry preceded by an indicator of the sender or author, such as a nickname for the author. This provides the "readability" of a chat room discussion to an otherwise difficult to comprehend chain forwarded email message.

Our invention outputs a single message, having the "thread-of-discussion" format, in place of the original chain forwarded text format.

Issues

In the first Office Action, Claims 1 - 27 were rejected under 35 U.S.C. §102(e) as being anticipated by US Patent 6,185,551, to Birrell, *et al.* (hereinafter "Birrell"). Subsequent to our reply and amendment to the first Office Action, Claims 1 - 27 were finally rejected in the second Office Action as being unpatentable over Birell in view of U.S. Patent 6,622,147 to Smiga (herein after Smith '147).

At issue are:

(a) the propriety of the rejection basis which includes Smiga '147 which is not properly prior art to our patent application;

(b) whether or not Birrell actually teaches parsing of a single, chain forwarded message into discussion entries;

(c) whether or not Birrell actually teaches sorting, reducing and formatting discussion entries into a thread-of-discussion format;

(d) whether or not Birrell actually teaches outputting a single message having the converted thread-of-discussion format text; and

(e) whether or not there is suggestion or motivation found in Birrell to make the

combination proposed by the Examiner.

Grouping of Claims

Claims 1 - 27 stand or fall together.

The Examiner's Rationale

In rejecting our independent claims 1, 10 and 19, the Examiner has reasoned that Birrell discloses all of our claimed steps, elements and limitations, except:

> ... chained email messages which indicate the beginning and ending of two or more discussion entries wherein each discussion entry represents quoted text or content produced during a previously-performed message forward or message reply operation (second Office Action, page 3, lines 12 - 15)

For this missing step, element or limitation, the Examiner has reasoned that Smiga teaches such chained email messages with such delimiters between discussion entries, and that:

> ... it would have been obvious to one of ordinary skill in the art at the time invention was made to combine Smiga with Birrell because it would provide collaboration between users and efficiently displaying the parsed and linked structured output of the emails. (second Office Action, page 4, lines 1 - 4)

In rejecting Claims 2, 11 and 20, the Examiner has reasoned that Birrell teaches parsing of a chained electronic message as we have claimed, wherein the message is an SMTP message.

In rejecting Claims 3, 12, and 21, the Examiner has reasoned that Birrell teaches parsing of a chained electronic message as we have claimed, wherein the message is HTML.

In rejecting Claims 4, 5, 13, 13, 22 and 23, the Examiner has reasoned that Birrell teaches sorting of discussion entries according to timestamps as we have claimed, in first-to-last or last-to-first orders.

In rejecting Claims 6 and 15, the Examiner has reasoned that Birrell teaches reducing discussion entries to remove extraneous information as we have claimed.

In rejecting Claims 7, 16, and 25, the Examiner has reasoned that Birrell teaches outputting the sorted, reduced discussion entries and replacing full author email addresses with nicknames or abbreviations as we have claimed.

In rejecting Claims 8, 17, and 26, the Examiner has reasoned that Birrell teaches merging of text from a one chain forwarded message with the text of other chained electronic messages in a common chain group, as we have claimed.

In rejecting Claims 9 and 18, the Examiner has reasoned that Birrell teaches automatically addressing one or more members of a chain group to whom the output thread-of-discussion message is to be sent, as we have claimed.

In rejecting Claim 24, the Examiner has reasoned that Birrell teaches a short name label creator for substituting author long names and full addresses with short names or nicknames, as we have claimed.

In rejecting Claim 27, the Examiner has reasoned that Birrell teaches and address generator for automatically addressing the output thread-of-discussion format message to one or more members of a chain group.

Arguments

We propose that errors cumulative to the improper final rejection under 35 U.S.C. §103(a) of independent claims 1, 10, and 19, as well as rejection of all dependent claims, include:

(a) improperly rejecting our claims over art which is not prior art;

(b) incorrectly interpreting Birrell with respect to teaching parsing of a single, chain forwarded message into discussion entries;

(c) incorrectly interpreting Birrell with respect to teaching sorting, reducing and formatting discussion entries into a thread-of-discussion format;

(d) incorrectly interpreting Birrell with respect to teaching outputting a single message having the converted thread-of-discussion format text; and

(e) failing to establish where suggestion or motivation is found in Birrell to make the combination as proposed.

In the following paragraphs, our arguments in favor of patentability of Claims 1, 10, and 19, apply as well to all remaining claims which depend from claims 1, 10, and 19.

(a) Improperly Rejecting Our Claims over Art Which Is Not Prior Art

In the final rejections of Claims 1, 10, and 19, the Examiner has proposed a combination of Birrell with Smiga '147. Our filing date was 11/16/2000, and the filing date of Smiga '147 was 9/16/2002, nearly 2 years after our filing date. Thus, the Smiga '147 patent is not prior art to our filing.

Smiga '147, however, claims priority as a continuation to US Patent 6,421,678, to Smiga (hereinafter "Smiga '678"), which was filed prior to our filing date.

We have downloaded the text of both Smiga patents and compared them using a comparison tool, and they are not identical to each other. However, the sections cited by the examiner are similar, with minor differences.

As such, the rejection based upon Birrell combined with Smiga '147 is improper due to Smiga '147 not actually being prior art. Whereas an Appeal on this basis alone would likely result in an issuance by the Examiner of a new final rejection over Birrell in view of Smiga '678, our following arguments apply equally to combinations including Smiga '147 or alternatively Smiga '678. Thus, we will refer to the alternative Smiga patents simply as "Smiga" in the following paragraphs.

(b) Incorrectly Interpreting Birrell with Respect to Teaching Parsing of a Single, Chain Forwarded Message into Discussion Entries

We believe that Birrell does not teach parsing a *single* chain forwarded message to find multiple conversation entries *within* the single message, but instead teaches processing of *multiple* messages which constitute a thread of discussion (e.g. a group of separate messages which constitute a thread in the convention sense of a thread of messages).

In the final rejection rationale, the Examiner's quotation of our amended

claim omitted our inserted the "single" that specifies our invention parses the contents of a single message for multiple discussion entries contained within it (see pg. 2, item 4 of the final OA). Possibly this led to an oversight of the weight of this term in the claim, although our remarks which accompanied the amendment also highlighted this added term to the claim.

In our reply to the first Office Action, we pointed out that a traditional or conventional "thread of discussion" in email is a series of *separate* messages. Futher, we provided an online dictionary definition to corroborate our assertion that a normal "thread of discussion" is a set of multiple messages, not a singled chain forwarded message with multiple discussion entries in it.

In preparation for this Appeal Brief, we taken further note that even Birrell employs the "multiple message" definition of a thread, thus there can be no question as to whether or not Birrell teaches processing multiple messages in a thread (e.g. the conventional definition), or processing of multiple discussion entries within a single chain forwarded message (as we have claimed):

> Sorting Search Results
>
> When a search for an issued query completes, the results of the search are presented in an order according to their MessageID 411, FIG. 4. In practice, this means that qualifying messages are presented in the temporal order of when the messages were received.
>
> Most prior art e-mail systems allow other sort orders, such as by sender, or by **message thread (a sequence of related messages)**. There is no need for such capabilities here. Consider the following possibilities.
>
> Messages from a particular user can be specified by including in a query a term such as "from:jones." This will locate only messages from a particular user. **You can select messages of a particular "thread" by using the "view discussion" option of the user interface described below.** As

> stated above, messages for a particular date range can be specified in the query. (Birrell col. 11, lines 24 - 41, emphasis added)

Note especially that the plural form of "messages" is always used by Birrell in this excerpts of their disclosure, and the definition is given right in the text (e.g. a thread is a sequence of related messages). Also, please note that Birrell is completely silent is to whether or not a set of discussion entries in a body of a single message is considered a thread of messages.

More evidence that Birrell does not parse the body of a single message for discussion entries, but rather sorts multiple messages for a discussion thread is found later in Birrell's disclosure:

> Queries Menu
>
> This menu includes the View Discussion, Name Current Query, Forget Named Query, Exclude "deleted" Message, and Your Query Options. The View Discussion option issues a query for messages related to the currently selected message. Here, **"related" means any messages which share approximately the same subject line, and/or being in reply to such a message, or messages linked by a common standard "RFC822" message ID.** (Birrell col 13, lines 44 - 51, emphasis added)

Clearly, from this latter passage, Birrell considers a thread of discussion to be multiple messages which are "related" by a similar subject line, reply to a similar message, or having a specific message ID. Again, Birrell is silent as to discussion entries contained *within* the body of a *single* message.

As such, Birrell in view of Smiga fails to teach parsing of a single, chain forwarded message into discussion entries as we have claimed.

(c) **Incorrectly Interpreting Birrell with Respect to Teaching Sorting, Reducing and Formatting Discussion Entries into a Thread-of-Discussion Format**

The foregoing citations from Birrell's disclosure establish that their system processes *multiple related messages* in a thread, and it logically follows that their system sorts and reduces these multiple messages. Because Birrell is silent as to extracting *discussion entries* from a *single* chain forwarded message, it incorrect to interpret Birrell's disclosure to mean that they also sort and reduce such discussion entries.

When Birrell's disclosure is interpreted without reading our disclosure into Birrell's disclosure, our claims are not anticipated or rendered obvious by Birrell in view of Smiga.

(d) **Incorrectly Interpreting Birrell with Respect to Teaching Outputting a Single Message Having the Converted Thread-of-discussion Format Text**

In our reply to the first Office Action, we pointed out that Birrell does not actually teach outputting a single message in which a "thread-of-discussion" format text is placed. In the second Office Action, the Examiner deemed this argument unpersuasive, but no additional argument or support from the cited references were provided.

In the second Office Action, the Examiner cited the following passage of Birrell's disclosure as teaching our step of "outputting" as claimed in our final step or element of Claims 1, 10, and 19:

> Outputting, e.g., **displaying or printing, a message removes the unread label** 720 under the assumption that it has been read. A user can explicitly add or remove the unread label. A message can be deleted by attaching a "delete" label 730. This has the effect that the message will not been seen again because messages labeled as deleted are normally excluded during searches. Removing the deleted label has the

> effect of "un-deleting" a message. (Birrell col. 9, lines 25 - 32, our emphasis added)

and, the Examiner cited the following as teaching our limitation of "sorted":

> Sorting Search Results
>
> When a search for an issued query completes, the results of the search are presented in an order according to their MessageID 411, FIG. 4. In practice, this means that qualifying **messages** are presented in the temporal order of when the **messages** were received. (Birrell col. 11, lines 24 - 30, our emphasis added)

Further, the Examiner cited the following as teaching our limitation of "reduced discussion entries":

> Label Log
>
> Although **a message may never change**, the set of labels associated with a message may change. Because **labels can change**, a transaction log 440 is also maintained. The log 440 includes "add" entries (+label) 450, and "remove" entries (-label) 460. Each entry includes the MsgID 451 or 453 of the effected message entry, and label that is being added (452) or deleted (453). (Birrell col. 7, lines 9 - 14, our emphasis added)

Please note that in the second Office Action, the Examiner provided no citation from Birrell or Smiga where our next limitation of "into a single message" was found.

In the reasoning for these rejection, the Examiner continued to cite Birrell as to where our next limitation "having a thread-of-discussion message format" is believed to be taught:

> **Messages** from a particular user can be specified by including in a query a term such as "from:jones." This will locate only messages from a particular user. You can select **messages of a particular "thread"** by using the "view discussion" option of the user interface described below. As stated above, **messages** for a particular date range can be specified in the query. (Birrell col 11, lines 35 - 40, our emphasis added)
>
> ...
>
> From the user's perspective, access to the mail services is implemented by extensions to the Web browser, such as Java applets. **Messages** are normally displayed by their primary component being transmitted to the client in the HTML format, and being displayed in the Java applet's window. The first line of a displayed message contains any "hot-links" which the user can click to display the message in one of the Web browser's windows, either with the HTML formatting, or as the **original text uninterpreted by the system**. (Birrell col. 12, lines 15 - 24, our emphasis added)

From these passages, we believe it is clear that Birrell sorts multiple messages, not entries extracted from a single message, as the plural form of "message" is employed consistently throughout. Additionally, we believe that these citations actually support our assertion that Birrell does not change the content of the messages (e.g. does not reformat the discussion entries found within

a single message) other than a read/unread label, as at several points in these citations it is disclosed that the messages do not change. Finally, we believe that these citations also establish that Birrell's output is displaying or printing, but does not include creating a new message with new content in the form of our thread-of-discussion format as we have claimed.

For these reasons, Birrell in view of Smiga does not teach our steps, elements or limitations of outputting our sorted and reduced discussion entries into a single message having a thread-of-discussion message format.

(e) **Failing to Establish Where Suggestion or Motivation Is Found in Birrell to Make the Combination as Proposed**

In the second Office Action wherein Smiga was first introduced in combination with Birrell, the Examiner has stated:

> Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to combine Smiga with Birrell because ti would provide collaboration between users and efficiently displaying the parsed and linked structured output of the emails. (Second Office Action, page 4, first paragraph)

No column and line numbers are provided establishing where in Birrell this motivation or citation is found. We have performed a text search on the contents of Birrell's disclosure using the USPTO's HTML online copy of the patent, and are unable to find any instances of the words or phrases "collaboration", "efficient" or "efficient display". In fact, Birrell's disclosure does not explicitly state objects of their invention, nor do the include a customary "Therefore there is a need in the art for ..." statement, but Birrell's Background of the Invention sets forth a number of "deficiencies" to be "overcome" in column 1, including:

1. organizing complex information such as emails (line 27);
2. efficiently and coherently retrieving email messages (line 29);
3. filtering a deluge of junk mail (lines 31 - 36);
4. storing email box state and messages on a local computer which may be inaccessible from another remote computer (lines 36 - 54);
5. managing emails organized by folders (lines 54 - 56); and
6. accessing email via low bandwidth connecitons (lines 56 - 57).

There is no mention of processing a single chain forwarded message to be readable in a thread-of-discussion format in Birrell.

Smiga, however, uses the word "collaboration" in several instances, but is completely silent as to a "thread" or "discussion". Smiga's objects of their invention are stated as providing a system which "links information" between application programs (e.g. between a word processor and a calendaring program) (Smiga '147 col. 1, lines 25 - 65), and between multiple users (Smiga '147 col. 2, lines 24 - 34), so that they can collaborate and track action items (Smiga '147 col. 2, lines 65 - 67). Smiga is silent as to a thread of discussion, and a word search of the HTML version of the patent on the USPTO's web site reveals that the words "discussion" and "thread" do not appear in the text.

As such, motivation or suggestion to make the proposed combination has not been properly established in the cited art, and the rejection over Birrell in view of Smiga should be withdrawn.

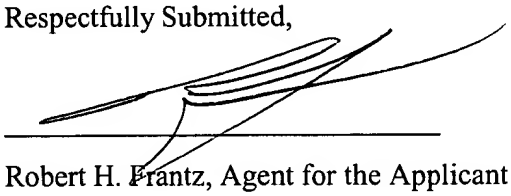
Dependent Claim Rejections

As the remaining claims 2 - 9, 11 - 18, and 20 - 27 depend from Claims 1, 10 and 19, respectively, they inherit the claim steps, limitations and elements of Claims 1, 10, and 19. For the same reasons as discussed in the foregoing paragraphs, the rejections of these claims is incorrect and improper, and should be withdrawn.

Summary

For the foregoing reasons, it is submitted that the Examiner's rejections of Claims 1 - 27 were erroneous, and reversal of these decisions is respectfully requested.

Respectfully Submitted,



Robert H. Frantz, Agent for the Applicant

Reg. No. 42,553

Franklin Gray Patents, LLC

P.O. Box 23324

Oklahoma City, OK 73127

Tel: 405-812-5613

Fax: 405-440-2465

Appendix

Clean Form of Amended Claims

Claim 1 (amended):

A method for creating thread-of-discussion electronic mail messages for chained electronic mail messages in an electronic mail system, said method comprising the steps of:

parsing text of the body of a single chained electronic mail message into discussion entries, said parsing being performed by finding delimiters and message segment indicators within the text of the chained electronic mail message which indicate the beginning and ending of two or more discussion entries wherein each discussion entry represents quoted text or content produced during a previously-performed message forward or message reply operation ;

sorting said discussion entries into a preferred order;

reducing the discussion entries to discussion information by eliminating redundant and unnecessary information from said discussion entries; and

outputting the sorted, reduced discussion entries into a single message having a thread-of-discussion message format.

Claim 2 (original):

The method as set forth in Claim 1 wherein said step of parsing the text of a chained electronic mail message into discussion entries comprises parsing a Simple Mail Transfer Protocol message.

Claim 3 (original):

The method as set forth in Claim 1 wherein said step of parsing the text of a chained electronic mail message into discussion entries comprises parsing a Hyper Text Markup Language message.

Claim 4 (original):

The method as set forth in Claim 1 wherein said step of sorting said discussion entries into a preferred order comprises sorting the discussion entries into a first-to-last order based upon timestamps associated with the discussion entries.

Claim 5 (original):

The method as set forth in Claim 1 wherein said step of sorting said discussion entries into a preferred order comprises sorting the discussion entries into a last-to-first order based upon timestamps associated with the discussion entries.

Claim 6 (original):

The method as set forth in Claim 1 wherein said step of reducing the discussion entries to discussion information comprises removing extraneous non-discussion field and formatting information from the discussion entries.

Claim 7 (original):

The method as set forth in Claim 1 wherein said step of outputting the sorted, reduced discussion entries into a thread-of-discussion message format further comprises replacing full electronic mail addresses for authors of said discussion entries with short names or abbreviations associated with the full electronic mail addresses.

Claim 8 (original):

The method as set forth in Claim 1 further comprising a step of merging text from a chained electronic mail message with text from other chained electronic messages associated with a common chain group.

Claim 9 (original):

The method as set forth in Claim 1 further comprising a step of automatically addressing a new electronic mail message to one or more of members of an associated chain group, said new electronic mail message containing said sorted, reduced discussion entries in a thread-of-dicussion format.

Claim 10 (amended):

A computer-readable medium containing program code for creating thread-of-discussion electronic mail messages for chained electronic mail messages in an electronic mail system, said electronic mail system being capable of executing program code, said program code when executed causing the electronic mail system to perform the steps of:

parsing the text of the body of a single chained electronic mail message into discussion entries, said parsing being performed by finding delimiters and message segment indicators within the text of the chained electronic mail message which indicate the beginning and ending of two or more discussion entries wherein each discussion entry represents quoted text or content produced during a previously-performed message forward or message reply operation;

sorting said discussion entries into a preferred order;

reducing the discussion entries to discussion information by eliminating redundant and unnecessary information from said discussion entries; and

outputting the sorted, reduced discussion entries into a single message having a thread-of-discussion message format.

Claim 11 (original):

The computer-readable medium as set forth in claim 10 wherein said program code for parsing the text of a chained electronic mail message into discussion entries comprises program code for parsing a Simple Mail Transfer Protocol message.

Claim 12 (original):

The computer-readable medium as set forth in claim 10 wherein said program code for parsing the text of a chained electronic mail message into discussion entries comprises program code for parsing a Hyper Text Markup Language message.

Claim 13 (original):

The computer-readable medium as set forth in claim 10 wherein said program code for sorting said discussion entries into a preferred order comprises program code for sorting the discussion entries into a first-to-last order based upon timestamps associated with the discussion entries.

Claim 14 (original):

The computer-readable medium as set forth in claim 10 wherein said program code for sorting said discussion entries into a preferred order comprises program code for sorting the discussion entries into a last-to-first order based upon timestamps associated with the discussion entries.

Claim 15 (original):

The computer-readable medium as set forth in claim 10 wherein said program code for reducing the discussion entries to discussion information comprises removing extraneous non-discussion field and formatting information from the discussion entries.

Claim 16 (original):

The computer-readable medium as set forth in claim 10 wherein said program code for outputting the sorted, reduced discussion entries into a thread-of-discussion message format further comprises program code for replacing full electronic mail addresses for authors of said discussion entries with short names or abbreviations associated with the full electronic mail addresses.

Claim 17 (original):

The computer-readable medium as set forth in Claim 10 further comprising program code for performing the step of merging text from a chained electronic mail message with text from other chained electronic messages associated with a common chain group.

Claim 18 (original):

The computer-readable medium as set forth in Claim 10 further comprising program code for step of automatically addressing a new electronic mail message to one or more of members of an associated chain group, said new electronic mail message containing said sorted, reduced discussion entries in a thread-of-dicussion format.

Claim 19 (amended):

A system for producing thread-of-discussion formatted electronic messages for chained electronic messages in an electronic mail system, said electronic mail system having a processor suitable for executing program code, and said electronic mail system having a means for receiving chained-transmitted electronic messages via a computer network, said system comprising:

a message parser for parsing text in a body section of a single chained electronic message into discussion entries by finding delimiting indicators within the text of chained electronic message which indicate the beginning and ending of two or more discussion entries wherein each discussion entry represents quoted text or content produced during a previously-performed message forward or message reply operation ;

an entry sorter for sorting discussion entries into a preferred order;

an information reducer for removing extraneous message information, data, and fields which are unrelated to substantive discussion; and

a message output creator for creating a thread-of-discussion message containing said sorted and reduced discussion entries.

Claim 20 (original):

The system as set forth in claim 19 wherein said message parser is adapted to parse Simple Mail Transfer Protocol messages.

Claim 21 (original):

The system as set forth in claim 19 wherein said message parser is adapted to parse Hyper Text Markup Language messages.

Claim 22 (original):

The system as set forth in claim 19 wherein said entry sorter is adapted to sort discussion entries into a first-to-last order based upon timestamps associated with each discussion entry.

Claim 23 (original):

The system as set forth in claim 19 wherein said entry sorter is adapted to sort discussion entries into a last-to-first order based upon timestamps associated with each discussion entry.

Claim 24 (original):

The system as set forth in claim 19 wherein said message output creator further comprises a short name label creator for substituting full electronic mail addresses associated with said discussion entries with short names associated with said full electronic mail addresses.

Claim 25 (original):

The system as set forth in claim 19 wherein said message output creator further comprises a short name label creator for substituting full electronic mail addresses associated with said discussion entries with abbreviations of said full electronic mail addresses.

Claim 26 (original):

The system as set forth in claim 19 wherein said message parser is adapted to merge two or more chained electronic messages associated with a chain group.

Claim 27 (original):

The system as set forth in claim 19 wherein said message output creator further comprises and automatic message address generator for automatically addressing a new electronic message to one or more members of a chain group.